

LEAD TESTING  
IN PUBLIC SCHOOLS  
SAMPLING PLAN

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## **Section 1**

### **Plumbing Fixture Selection Criteria for Lead Sampling in School Systems**

All schools must complete a plumbing fixtures inventory for each building to be tested. The inventory shall delineate the type of fixture (e.g., water cooler, kitchen sink, bathroom sink, etc.), the make/manufacture of the fixture (e.g., Delta, Moen, etc.), and the approximate year the fixture was installed or manufactured. Fixtures manufactured from 1982 to 1987 will be given preference as possible sampling sites. If there are no fixtures manufactured from 1982 to 1987, then the oldest fixtures will be given preference as possible sampling site.

The number of fixtures selected for sampling will be determined on a case by case basis, depending on the variety of fixtures located in each school building. Only fixtures in school buildings used by students are required to be sampled (e.g., fixtures in a bus maintenance facility are not required to be sampled). If multiple buildings on a campus were constructed at the same time, using the same type fixtures, then fixtures from only one of the buildings are required to be sampled and tested.

Water coolers and kitchen sinks are to be given preference as sample sites. A sample must be collected from at least one water cooler and one kitchen sink. Other type fixtures (e.g., bathroom sinks) are not required to be sampled, but may be selected if there is reason to believe the fixture poses a significant lead exposure risk to students and/or staff.

At a minimum the following types of fixtures must be inventoried:

- Kitchen Sink Faucets (KC)
- Water Coolers (WC)
- Drinking Water Bubblers (WB)
- Nurses Office Sink Faucets (NS)

## Plumbing Fixture Inventory Form

School System: \_\_\_\_\_

School: \_\_\_\_\_

Building Number: \_\_\_\_\_

Number of Samples Required: (TBD)

Check if Sampled	Fixture Type	Year Manuf.	Make	Location

## **Lead Sampling Procedures**

The monitoring period will be during the school year, preferably during August, September, April or May. Regardless, samples must be taken when school is in session.

All lead samples must be first-draw or initial samples and must be 250 milliliters in volume. This volume is representative of water per serving consumed by a child. The water must be motionless (not used) in the plumbing system of each school facility or building for a minimum of eight hours. While the water cannot be used for more than eight hours, do not collect samples from sites which have not been used for an extended period of time; such as a site which has had no water use for several days.

Samples shall be collected from kitchen sink faucets, drinking fountains, or water bubblers. Other type fixtures (e.g., bathroom sink faucets) may be selected, if there is reason to believe the fixture poses a significant lead exposure risk to students and/or staff.

All samples shall be collected from an interior, cold water tap from which water is typically drawn for consumption.

Sampling sites must not include faucets which have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants. This includes devices such as filters, softeners, RO systems, etc.

Samples may be collected by designated personnel after receiving training on the proper sampling procedures.

If resampling is required, designated personnel shall collect the resample from the same sampling site used in the previous round of sampling, unless a change of sampling site is made in accordance with "section 2" of this document.

Resampling shall be required if it is determined lead concentrations in an initial sample exceeds the designated "action level" established for schools (i.e., 20 ppb).

## **Sites and Situations to Avoid**

### **Do not use**

- A mop sink, outside faucet or a tap that is not generally used or intended for human consumption
- A site which is vacant (*don't make special arrangements to get access to site*)
- A site which has undergone recent (within the last 6 months) plumbing improvements or changes including faucets at the specific sample location
- A tap that has any type of treatment

## **Lead Sampling Instructions for Designated Personnel**

### **Please read these instructions before opening the sample bottle**

These samples are being collected to determine the levels, if any, of lead in your tap water. This sampling is recommended by the U. S. Environmental Protection Agency and the State of Alabama.

### **Sampling Requirements**

- Do not rinse or overfill the bottle
- Samples should be collected from water fountains and kitchen water faucets. Do not use an outdoor faucet. If you resampling, use the same water cooler or kitchen sink faucet you used previously.
- Before sampling, do not use water from the faucet for at least 8 hours. Also, do not use water in the school facility during the no use period.
- Collect the sample after at least 8 hours of no use before the water in the school facility is used for anything else. The water should sit in the pipes unused for at least 8 hours.

### **Sampling Steps**

1. Open the bottle and hold under the faucet.
2. Turn the cold water faucet or water cooler on to a low flow and collect the first water that comes out of the faucet. (DO NOT RUN WATER FROM THE TAP BEFORE FILLING THE BOTTLE)
3. Fill the bottle to the shoulder.
4. Place lid on bottle and tighten cap securely.
5. Fill in label completely except for the sample ID.
6. Place bottle in shipping or pickup container.
7. Return the sample to the analytical laboratory as soon as possible.

Please note on the sample sheet the following conditions:

- If any plumbing repairs or pipe replacements have been done in the last 5 years.
- If you have a water softener or other treatment or filter.

If you have any questions contact the following:

Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

## **Section 2**

### **Making Changes to Sampling Site Locations**

The school will make an assessment of its ability to sample a sufficient number of appropriate sites from this lead sampling plan well in advance of the monitoring period. Samples should be collected early in the monitoring period to ensure samples arrive at the lab in a timely fashion and are analyzed well before the end of the monitoring period.

Changes to sampling sites are allowed when the designated personnel can no longer gain access to the site or if the original site location no longer meets the selection criteria (for example, if a school facility is vacant or demolished, if a softener is added, or plumbing upgrades have been made).

Additional changes can also be made if the school adds new sampling sites, provided they meet the requirements of a proper sampling location.

This lead sampling plan must be updated whenever there is an addition or deletion of a site and should be updated to identify sites that meet the requirements of proper sampling locations that can be readily substituted if needed during future monitoring events.

**Complete one of these forms for each site sampled**

SCHOOL SYSTEM: \_\_\_\_\_

NAME OF SCHOOL: \_\_\_\_\_

BUILDING NUMBER: \_\_\_\_\_

Sample collection date: \_\_\_\_\_

**SAMPLES SITE IDENTIFICATION AND CERTIFICATION**

***RESULTS OF MONITORING***

Sample location: \_\_\_\_\_

Analytical Lead result, in mg/L (milligrams per liter): \_\_\_\_\_

***CHANGE OF SAMPLING SITES***

**Only complete this section if changing sampling site.**

Original Site Location:

\_\_\_\_\_  
\_\_\_\_\_

New Site Location:

\_\_\_\_\_  
\_\_\_\_\_

Reason for Change (attach additional pages if necessary):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SIGNATURE (name & title)

Today's Date: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

### **Section 3**

#### **Lead Consumer Notice and Certification Form**

School Name: \_\_\_\_\_ Date: \_\_\_\_\_

#### **LEAD CONSUMER NOTICE ANALYTICAL RESULTS FOR LEAD TAP WATER MONITORING**

Our school facility voluntarily collected tap water samples to determine the lead levels in our school's drinking water. The school facility was selected for this monitoring as part of our overall sampling plan. This notice is provided to you with the analytical results of the water sample collected at the school facility.

Sample location: \_\_\_\_\_ Sample collection date: \_\_\_\_\_

Analytical Lead result, in mg/L (milligrams per liter): \_\_\_\_\_

#### **Definitions**

*Action Level (AL):* The action level is a concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a school facility must follow. The lead action level for schools is 0.020 mg/L.

*Maximum Contaminant Level Goal (MCLG):* The maximum contaminant level goal is the level of a contaminant in drinking water below which there is no known or expected risk to health. The MCLG allows for a margin of safety. The lead MCLG is zero.

#### **What are the health effects of lead and how can I reduce my exposure?**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and plumbing. The school is responsible for providing drinking water that meets all federal and state standards, but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water and using only cold water for drinking or cooking. Information on lead in drinking water and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov>.

When replacing your bathroom or kitchen faucet, consider a "lead-free" faucet that meets NSF/ANSI Standard 61 Annex G (California), which is less than 0.25% lead by weight.

#### **Who can I contact at my water system for more information?**

School System

#### **Consumer Notice Instructions:**

Schools should complete the consumer notice and distribute the notice to each building that was tested.

#### **Consumer Notice Content**

The consumer notice should include the mandatory language in the example provided with these instructions. It should be multilingual, where appropriate.

**Distribution of the Consumer Notice**

Schools should provide the consumer notice to all the people served at each building that was a part of the sampling plan. The consumer notice should be provided within 30 days of receiving the sampling results. ADEM recommends schools provide the consumer notice as soon as available, especially if the result is elevated, to allow affected persons to take corrective actions in a more timely manner.

Date completed: \_\_\_\_\_ (*enclose a copy of notice*)

**Delivery Certification**

I certify under penalty of law that I am familiar with the information submitted in this document and that it is true, accurate, and complete.

**Name (print or type)** \_\_\_\_\_ **Title** \_\_\_\_\_

**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_